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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,791	12/20/2001	James W. Clark	KCX-391(16284)	9606
22827	7590	01/21/2004	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			BOYD, JENNIFER A	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/027,791	Applicant(s) CLARK ET AL. 	
	Examiner Jennifer A Boyd	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5 pages</u> | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I: claims 1 - 38 in Applicant's Response dated October 20, 2003 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 - 9 and 11 - 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US 2002/0103098 A1).

Harrison et al. is directed to a low residue aqueous hard surface cleaning and disinfecting composition (Title).

As to claim 1, Harrison teaches an aqueous-based cleaning composition comprising a quaternary ammonium surfactant compound having germicidal properties (Abstract). Harrison teaches that the quaternary ammonium compound is present in an amount of from about 0.0025% to about 0.5% wt based on the total weight of the inventive composition (page 2, [0017]). Harrison teaches that the composition may be applied to a hard surface by using a wet

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wipe comprising a non-woven fabric (page 7, [0091]). The Examiner equates the non-woven fabric to Applicant's "substrate".

As to claim 2, Harrison teaches that benzalkonium chloride may be used as the quaternary ammonium compound (page 2, [0016]). It should be noted that on page 14, line 2 of the Applicant's Specification, the Applicant indicates that benzalkonium chloride meets the requirements of the formula in claim 2.

As to claim 3, Harrison teaches that BARDAC 2080 may be used as the quaternary ammonium compound (page 2, [00166]). It should be noted that on page 14, line 23 of Applicant's Specification, the Applicant indicates that BARDAC 2080 meets the requirements of the formula in claim 3.

As to claims 4 and 5, Harrison teaches that the quaternary ammonium compound is present in an amount of from about 0.0025% to about 0.5% wt based on the total weight of the inventive composition (page 2, [0017]).

As to claim 6, Harrison teaches that a chelating agent may be present in the formulation (page 4, [0056]). It should be noted that it is known in the art that a chelating agent is a sequestrant. Harrison teaches that the chelating agent may be present in amounts less than 2.5% by weight of the composition (page 5, [0056]).

As to claim 7, Harrison teaches that the composition may contain a nonionic surfactant (page 4, [0056]).

As to claim 8, Harrison teaches that the nonionic surfactant is present in amounts less than 2.5% by weight of the composition (page 5, [0056]).

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As to claim 9, Harrison teaches that the composition comprises an alkylene glycol solvent such as propylene glycol n-butyl (pages 3 and 4, [0046]). It should be noted that on page 23, lines 20 – 30 of the Applicant's Specification, the Applicant indicates that propylene glycol is a non-aqueous solvent. Harrison teaches that the propylene glycol n-butyl is present in amount ranging from 0.01% to 10% wt (page 4, [0046]).

As to claim 26, Harrison teaches that the composition can be applied to a hard surface by means of a wet wipe comprising a non-woven fabric (page 7, [0091]).

As to claims 27 – 28 and 35, Harrison teaches an aqueous-based cleaning composition comprising a quaternary ammonium surfactant compound having germicidal properties (Abstract). Harrison teaches that the quaternary ammonium compound is present in an amount of from about 0.0025% to about 0.5% wt based on the total weight of the inventive composition (page 2, [0017]). Harrison teaches that benzalkonium chloride may be used as the quaternary ammonium compound (page 2, [0016]). Harrison teaches that the composition may be applied to a hard surface by using a wet wipe comprising a non-woven fabric (page 7, [0091]).

As to claim 29, Harrison teaches that a chelating agent may be present in the formulation (page 4, [0056]). It should be noted that it is known in the art that a chelating agent is a sequestrant. Harrison teaches that the chelating agent may be present in amounts less than 2.5% by weight of the composition (page 5, [0056]).

As to claim 30, Harrison teaches that the composition may contain a nonionic surfactant (page 4, [0056]). Harrison teaches that the nonionic surfactant is present in amounts less than 2.5% by weight of the composition (page 5, [0056]).

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As to claim 31, Harrison teaches that the composition comprises an alkylene glycol solvent such as propylene glycol n-butyl (pages 3 and 4, [0046]). It should be noted that on page 23, lines 20 – 30 of the Applicant's Specification, the Applicant indicates that propylene glycol is a non-aqueous solvent. Harrison teaches that the propylene glycol n-butyl is present in amount ranging from 0.01% to 10% wt (page 4, [0046]).

As to claim 36, Harrison teaches that composition may contain a nonionic surfactant (page 4, [0056]), chelating agent (page 4, [0056]) and/or non-aqueous solvent (pages 3 and 4, [0046]) may be present in the composition.

As to claims 1, 25, 27, 34, 35 and 38, it should be noted Examiner considers the clauses "capable of being released from said nonwoven fabric into a solution such that said quaternary ammonium compound is present within said solution in an amount less than 2000 parts per million of said solution" as stated in claims 1, 27 and 35 and "capable of being released into said solution in an amount of between about 150 to about 400 parts per million of solution" as stated in claims 25, 34 and 38 to be "capable of" type limitations. It has been held that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. For the purposes of examination at this time, the Examiner has not given weight to either of the above mentioned clauses.

As to claims 1, 11 - 24, 27, 32 - 33, 35 and 37, although Harrison does not explicitly teach the claimed log reduction for E. Coli of at least about 2 as required by claim 1, the pH of the sanitizing formulation is greater than about 8 as required by claim 11, the pH of the sanitizing

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formulation is between about 9 and 12 as required by claim 12, the log reduction for E. Coli is of at least about 3 as required by claims 13 and 27, the log reduction for E. Coli is of at least about 4 as required by claim 14, the log reduction for E. Coli is of at least about 5 as required by claim 15, the log reduction for S. Aureus is of at least about 2 as required by claim 16, the log reduction for S. Aureus is of at least about 3 as required by claims 17 and 27, the log reduction for S. Aureus is of at least about 4 as required by claim 18, the log reduction for S. Aureus is of at least about 5 as required by claim 19, the kill efficiency ratio of a least about 10 as required by claim 20, the kill efficiency ratio of a least about 100 as required by claims 21 and 35, the kill efficiency ratio of a least about 400 as required by claim 22, the antimicrobial reduction of less than 95% as required by claim 23, the antimicrobial reduction between about 60 – 80% as required by claim 24, the log reduction for E. Coli is of at least about 4 as required by claim 32, the log reduction for S. Aureus is of at least about 4 as required by claim 33 and the kill efficiency ratio of a least about 200 as required by claim 37, it is reasonable to presume that the properties are inherent to Harrison. Support for said presumption is found in the use of like materials (i.e. a substrate comprising a composition containing water and a quaternary ammonium compound in an amount of 0.0025% to about 0.5% wt) which would result in the claimed properties. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties above would obviously have been present once the Harrison product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

As to claims 1, 27 and 35, Harrison discloses the claimed invention except for that the sanitizing formulation is present in the substrate in an amount from about 150 – 600% of the dry

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weight of the wiper. It should be noted that the amount of the sanitizing formula present in the wipe is a result effective variable. For example, as the amount of the sanitizing formulation increases, the application surface becomes more saturated and the formulation is able to clean more efficiently and effectively. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the sanitizing formulation present in the substrate in an amount from about 150 – 600% of the dry weight of the wiper as required by claim 1 since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the level of sanitizing formulation based on the dry weight of the wiper in order to effectively and efficiently clean the desired surface.

4. Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dodd et al. (US 6,656,456).

Dodd is directed to a skin deodorizing composition (Title).

As to claim 1, Dodd teaches a composition comprising antimicrobial quaternary ammonium compounds such as benzalkonium chloride (column 8, lines 5 – 20). Dodd teaches that the quaternary compound is present in the range from about 0.001% to about 0.8% by weight of the composition (column 9, lines 1 – 15). Dodd teaches that the composition can be incorporated into an insoluble substrate such as in the form of a treated wipe (column 24, lines 60 – 68).

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As to claim 10, Dodd teaches a preservative may be present in the amount of about 0.0002% to about 0.2% by weight of the composition (column 20, lines 39 – 42).

As to claim 1, it should be noted Examiner considers the clause “capable of being released from said nonwoven fabric into a solution such that said quaternary ammonium compound is present within said solution in an amount less than 2000 parts per million of said solution” to be “capable of” type limitation. It has been held that an element is “capable of” performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. For the purposes of examination at this time, the Examiner has not given weight to the clause.

As to claim 1, although Dodd does not explicitly teach the claimed log reduction for E. Coli of at least about 2 as required by claim 1, it is reasonable to presume that the properties are inherent to Dodd. Support for said presumption is found in the use of like materials (i.e. a substrate comprising a composition containing water and a quaternary ammonium compound in an amount of 0.001% to about 0.8% wt) which would result in the claimed properties. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties above would obviously have been present once the Harrison product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

As to claim 1, Dodd discloses the claimed invention except for that the sanitizing formulation is present in the substrate in an amount from about 150 – 600% of the dry weight of the wiper. It should be noted that the amount of the sanitizing formula present in the wipe is a result effective variable. For example, as the amount of the sanitizing formulation increases, the application surface becomes more saturated and the formulation is able to clean more efficiently


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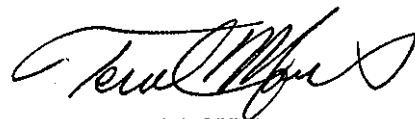
and effectively. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the sanitizing formulation present in the substrate in an amount from about 150 – 600% of the dry weight of the wiper since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the level of sanitizing formulation based on the dry weight of the wiper in order to effectively and efficiently clean the desired surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.


Jennifer Boyd
January 7, 2004


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
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